Developing a personalized approach to beta cell replacement for patients with a genetic form of diabetes

Grant Award Details

Developing a personalized approach to beta cell replacement for patients with a genetic form of diabetes

Grant Type: Inception - Discovery Stage Research Projects

Grant Number: DISC1-08868

Project Objective: To determine the functional requirement for NEUROGENIN3 in the differentiation, maintenance, function, and survival of human pancreatic endocrine cells.

Investigator:

Name:	Senta Georgia
Institution:	Children's Hospital of Los Angeles
Type:	PI

Disease Focus: Diabetes

Human Stem Cell Use: iPS Cell

Cell Line Generation: iPS Cell

Award Value: $180,000

Status: Active

Grant Application Details

Application Title: Developing a personalized approach to beta cell replacement for patients with a genetic form of diabetes

Public Abstract:	**Research Objective** To correct a gene mutation in a patient's stem cells and produce functional replacement cells for the patient to cure their diabetes. **Impact** WE expect that this project can serve as a model for developing new treatments for patients with certain forms of genetic diabetes. **Major Proposed Activities** • To understand how the patient's gene mutation affects the differentiation, function, and survival of stem cell derived insulin cells • To correct the patient's mutation in stem cells, then generate new insulin cells and test if they are fully functional.
Statement of Benefit to California:	California is already a leader in advancing stem cell technology. If we are successful, we believe that California can become the center for patients with certain forms of diabetes to come to for treatment.

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